

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-84. (Cancelled)

85. (Currently amended) A headlamp comprising:

at least one light source;

at least one reflector section;

at least one shield;

at least one lens ~~for a long distance illumination without glaring effects on concealment of the light source and reflecting surfaces;~~ and

at least one semi-shutter, which is used for covering an upper half of said lens in order ~~that not to reach the~~ light rays ~~which are~~ coming from said light source, from said at least one reflector section[[s]] and/or and from all reflecting surfaces inside the headlamp are not transmitted through said lens at ~~to~~ eye level of oncoming traffic users,

wherein the locations of said shield, said semi-shutter and focal points of lens are so adjusted within the headlamp that the light rays are directed towards ~~the~~ a lower half ~~half of~~ half of said lens through an opening placed between ~~the~~ an upper edge of the shield and a lower edge of the semi-shutter ~~and such that the~~ lower half of the lens which projects light rays to only road surfaces.

86. (Previously presented) The headlamp according to claim 85, wherein said shield is a movable part and it is disposed an angle of approximately 45° with the XX horizontal plane and its inner surface is reflective.

87. (Currently amended) The headlamp according to claim 85, wherein a bottom section of said semi-shutter ~~piece~~ and/or an upper edge of said shield is designed to create a cut-off section, in the form of a preferred cut-off type.

88. (Currently amended) The headlamp according to claim 85, wherein said lower half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

89. (Previously presented) The headlamp according to claim 85, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

90. (Currently amended) The headlamp according to claim 85, wherein ~~said~~ a full lens or half lens is used in place of said lens.

91. (Currently amended) The headlamp according to claim 85, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to said lower half lens.

92. (Currently amended) The headlamp according to claim 85, wherein an inner and/or outer surface of said semi-shutter is reflective.

93. (Cancelled)

94. (Previously presented) The headlamp according to claim 85, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

95. (Currently amended) A headlamp comprising:
at least one light source;
at least one reflector section;
at least one inclined reflective shield;
at least one lens ~~with a long distance illumination without glaring effects on concealment of the light source and reflecting surfaces; and~~
at least one reflective surface disposed in front of said at least one reflector section; and

at least one semi-shutter which is used for covering an upper half of said lens in order ~~that not to reach the~~ light rays ~~which are~~ coming from said light source, from said at least one reflector section, and from all reflecting surfaces inside the headlamp are not transmitted through said lens at eye level of oncoming traffic users,

wherein said inclined shield and reflective surface are so adjusted that the reflective surface reflects the light rays coming from the reflective shield towards ~~the a lower half lens~~ half of the lens.

96. (Currently amended) The headlamp according to claim 95, wherein ~~one or more~~ of said at least one reflective surface is ~~preferably disposed and~~ it is flat or concave and is used to direct the light rays falling from said shield onto itself to the lower half lens.

97. (Currently amended) The headlamp according to claim 95, wherein said shield is a movable part and ~~it~~ is disposed an angle of approximately 45° with the XX horizontal plane, and its inner surface is reflective.

98. (Currently amended) The headlamp according to claim 95, wherein a bottom section of said semi-shutter ~~piece~~ and/or an upper edge of said shield is designed to create a cut-off section, in the form of a preferred cut-off type.

99. (Currently amended) The headlamp according to claim 95, wherein, where more than one reflective shield is provided, the reflection angles of an inner surface of each said inclined reflective shield is adjusted to reflect the light rays in accordance with said ~~whole plurality of reflective shields, in case there are more than one reflective shield~~.

100. (Currently amended) The headlamp according to claim 95, wherein said lower half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

101. (Previously presented) The headlamp according to claim 95, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

102. (Previously presented) The headlamp according to claim 95, wherein said a full lens or half lens is used in place of said lens.

103. (Currently amended) The headlamp according to claim 95, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to said lower half lens.

104. (Currently amended) The headlamp according to claim 95, wherein an inner and/or an outer surface of said semi-shutter is reflective.

105. (Cancelled)

106. (Previously presented) The headlamp according to claim 95, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

107. (Currently amended) A headlamp comprising:
at least one light source;
at least one reflector section;
at least one lens ~~with a long distance illumination without glaring effects on concealment of the light source and reflecting surfaces;~~ and
at least one semi-shutter, which is used for covering an upper half of said lens in order ~~not to reach the~~ that light rays ~~which are~~ coming from said light source, from said at least one reflector section[[s]] and from all reflecting surfaces inside the headlamp are not transmitted through said lens at ~~to~~ eye level of oncoming traffic users,

wherein the locations of the lower edges of the at least one reflector section and the semi-shutter ~~is are~~ so adjusted that the light rays are directed towards the a lower half lens half of the

lens through an opening placed between the at least one reflector section and the lower edge of the semi-shutter ~~and such that the~~ lower half of the lens ~~which~~ projects light rays to only road surfaces.

108. (Currently amended) The headlamp according to claim 107, wherein said lower half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

109. (Previously presented) The headlamp according to claim 107, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

110. (Previously presented) The headlamp according to claim 107, wherein said a full lens or half lens is used in place of said lens.

111. (Currently amended) The headlamp according to claim 107, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to said lower half lens.

112. (Currently amended) The headlamp according to claim 107, wherein an inner and/or an outer surface of said semi-shutter is reflective.

113. (Canceled)

114. (Previously presented) The headlamp according to claim 107, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

115. (Currently amended) A headlamp comprising:
at least one light source;
at least one reflector section;

at least one lens ~~with a long distance illumination without glaring effects on concealment of the light source and reflecting surfaces;~~

at least one mirror reflector; and

at least one semi-shutter, which is used for covering an upper half of said lens in order ~~that not to reach the~~ light rays ~~which are~~ coming from said light source, from said at least one reflector section and from all reflecting surfaces inside the headlamp are not transmitted through said lens at eye level of oncoming traffic users,

wherein the locations of said mirror reflector and said semi-shutter ~~is~~ are so adjusted that the light rays are directed towards the a lower half lens half of the lens through an opening placed between the mirror reflector and a lower edge of the semi-shutter and such that the lower half of the lens ~~which~~ projects light rays to only road surfaces.

116. (Previously presented) The headlamp according to claim 115, wherein said mirror reflector is disposed against said reflector sections at an angle and it is flat or concave and the mirror reflector is so adjusted to reflect the light rays coming from the light source and reflective surfaces towards the lower half-lens.

117. (Currently amended) The headlamp according to claim 115, wherein said lower half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

118. (Previously presented) The headlamp according to claim 115, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

119. (Previously presented) The headlamp according to claim 115, wherein said a full lens or half lens is used in place of said lens.

120. (Previously presented) The headlamp according to claim 115, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to lower half lens.

121. (Currently amended) The headlamp according to claim 115, wherein an inner and/or an outer surface of said semi-shutter is reflective.

122. (Previously presented) The headlamp according to claim 115, wherein said lens is placed between the reflector sections and said mirror-reflectors, using one or more mirror-reflector within this design operating according to the indirect illumination principle.

123. (Previously presented) The headlamp according to claim 115, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

124. (Currently amended) A headlamp comprising:

at least one light source;

at least one reflector section[[s]];

~~at least one lens with a long distance illumination without glaring effects on concealment of the light source and reflecting surfaces;~~

at least one mirror reflector[.]; and

at least one semi-shutter, which is used for covering an upper half of said lens in order ~~not to reach the~~ that light rays ~~which are~~ coming from said light source, from said at least one reflector section and from all reflecting surfaces inside the headlamp are not transmitted through the lens at ~~to~~ eye level of oncoming traffic users, ~~and~~

wherein the locations of said mirror reflector, said semi-shutter and said at least one reflector section are so adjusted that the light rays are directed towards ~~the a~~ a lower half-lens half of the lens through an opening placed between the reflector section and a lower edge of the semi-shutter ~~and such that the~~ lower half of the lens ~~which~~ projects light rays to only road surfaces.

125. (Currently amended) The headlamp according to claim 124, wherein said mirror reflector is disposed against the reflector section at an angle and ~~it can be~~ wherein said mirror reflector is flat or concave and ~~the mirror-reflector~~ is so adjusted to reflect the light rays coming from the light source and reflective surfaces towards the lower half-lens.

126. (Currently amended) The headlamp according to claim 124, wherein said lower half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

127. (Previously presented) The headlamp according to claim 124, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

128. (Currently amended) The headlamp according to claim 124, wherein ~~said~~ a full lens or half lens is used in place of said lens.

129. (Currently amended) The headlamp according to claim 124, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to said lower half lens.

130. (Currently amended) The headlamp according to claim 124, wherein an inner and/or an outer surface of said semi-shutter is reflective.

131. (Previously presented) The headlamp according to claim 124, wherein said lens is placed between the reflector sections and said mirror-reflectors, using one or more mirror-reflector within this design operating according to the indirect illumination principle.

132. (Previously presented) The headlamp according to claim 124, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

133. (Currently amended) A method for a long-distance illumination without glaring effects that uses a headlamp comprising at least one light source, ~~and~~ at least one reflector section, at least a shield, and at least one lens, the method comprising the steps of:

covering with a semi-shutter an upper half of said lens in order to prevent ~~for reaching~~ the light rays coming from the light source, said at least one reflector section and all reflecting surfaces inside the headlamp from being transmitted through the upper half of the lens,

locating said shield front of the reflector section in order to prevent at least some of the light rays reaching from said reflector section to said lens,

adjusting said semi-shutter and said shield so that they establish a total concealment of said light source, said reflector sections and all reflecting surfaces inside the headlamp from an observer or oncoming traffic users looking above XX horizontal level ~~and so that~~ the light rays ~~passing pass~~ through an opening placed between the an upper edge of the shield and a lower edge of the semi-shutter and ~~reaching to the reach a lower half lens~~ half of the lens; and

projecting the light rays to only road surfaces through the lower half of the lens but not projecting them up to the XX horizontal plane that ~~is passing passes~~ the optical center of the lens ~~by the lower half lens~~.

134 (Currently amended) A method for a long-distance illumination without glaring effects that uses a headlamp comprising at least one light source, ~~and~~ at least one reflector section, and at least one lens, the method comprising the steps of:

covering with a semi-shutter an upper half of said lens in order to prevent ~~for reaching~~ the light rays coming from the light source, said at least one reflector section[[s]] and all reflecting surfaces inside the headlamp from being transmitted through the upper half of the lens,

locating a lower edge of the reflector section so that it is ~~able to be~~ near the level of the optical center of the lens,

adjusting said semi-shutter and said at least one reflector section so that they establish a total concealment of said light source and said reflector section[[s]] from an observer or oncoming traffic users looking above XX horizontal level ~~and so that~~ the light rays ~~passing pass~~ through an opening placed between the reflector section and a lower edge of the semi-shutter and ~~reaching to the reach a lower half lens~~ half of the lens; and

projecting the light rays to only road surfaces through the lower half of the lens but not projecting them up to the XX horizontal plane that ~~is passing passes~~ the optical center of the lens ~~by the lower half lens~~.